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# The AMERICAN DENTAL JOURNAL

BERNARD J. CIGRAND, M. S., D. D. S.  
Editor    Publisher    Proprietor.

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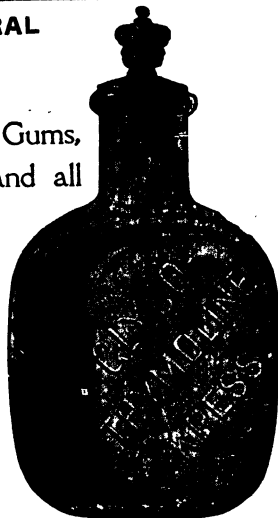
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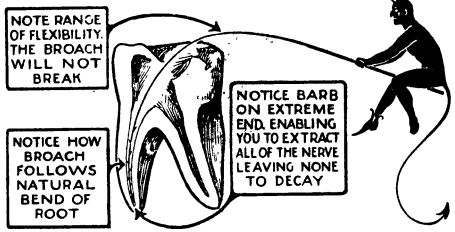
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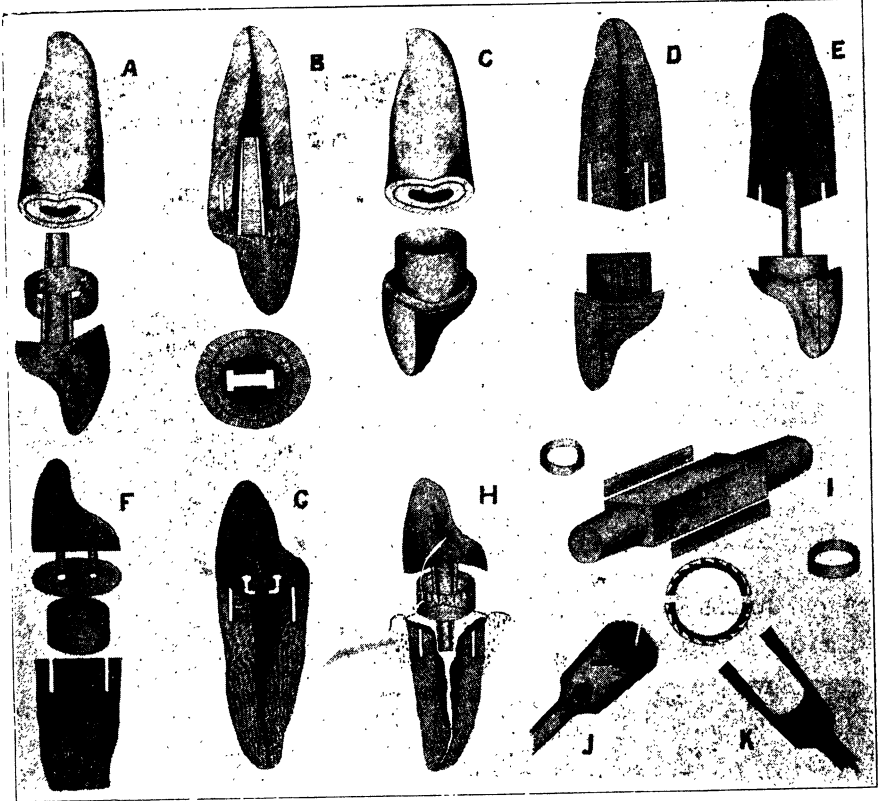


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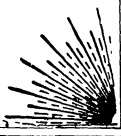
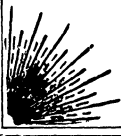
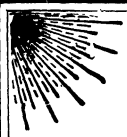
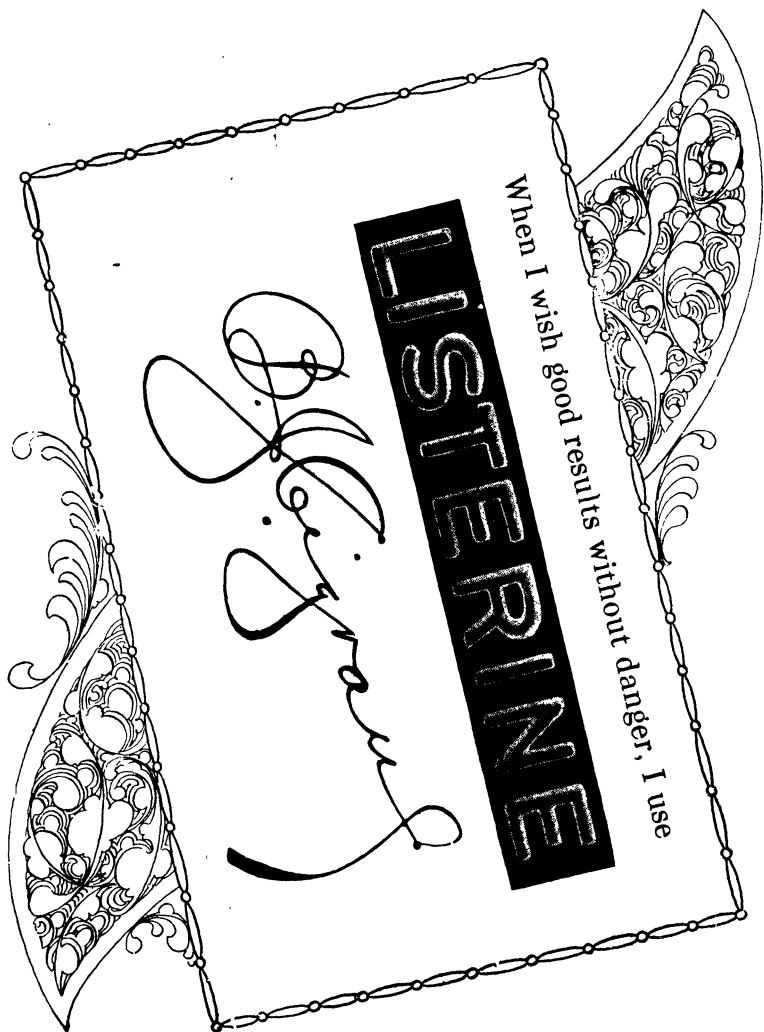
# The Gostlee Tooth



When I wish good results without danger, I use

**LISTERINE**

*Dr. J. C. Davis*





DR. BERNARD J. CIGRAND

EDITOR \*\* PUBLISHER \*\* PROPRIETOR

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November and December

Editorial and Comment

1916

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### THE FULL PORCELAIN CROWN AS A JACKET

There are innumerable incidents where the lateral tooth, either on the right or left side and sometimes on both sides, seems stunted or interrupted in its growth, and giving a pyramidal figure. For many years I have slightly ground down the irregular Hutchinson-like surface, and after proper separation placed a porcelain crown over the ill-shaped tooth. The ordinary Davis crown, lateral can easily and quickly be made to answer the purpose and do it splendidly. In this event you take a variety of small cone shaped stones, and proceed to grind out the hole sufficiently large to admit of the proper and easy fit of the pyramidal shape tooth. By painting the tooth with rouge or blackening it with carbon paper as used for duplications, you then place over the tooth the crown you are fitting, and of course the coloring material marks where the crown still requires grinding. If the work is carefully and painstakingly done, you will have given nature a praiseworthy restoration. And best of all you will not have needed to devitalize the tooth and this later item in these days of apical ulcerations and apical distresses in general should cause joy to the patient and hilarity to the operator. A clinic on this subject given at the Southwest Michigan Dental Society in 1897, was my second case. I have since placed on scores, and I am satisfied it is a practice worthy of your trial. This practice is not limited to laterals

but can be easily used in malformed cuspids, and lower incisors. Five cases in my last year's work alone, induces me to heartily urge you to save these pulps and encapsule the tooth with porcelain. The anchorage is good and if proper care in setting is observed, the case will be a success. Of course you can make a Land Jacket Crown and make a platinum cape, and fit porcelain facing and bake it into continuity with porcelain, but it will not look as good and will be less strong. You can also make the cap with gold and solder on a gold backed porcelain facing, all of which we all have done in days gone by,—but not any of these former methods will you get the aesthetic results as in the use of the Davis and the Justi crowns. And aethesia is an element now-a-days which compells the dentist to understand the laws of correspondences and aethesia of association, as evidenced when we set a crown amid other natural crowns which may have suffered during eruption and given them rough, irregular and depressed surfaces. And here your ability to match even Hutchinson pocked or indented surfaces becomes essential. The following which I wrote for Dental Review in 1899, page 901, is in part:

"The cutting edge often should be cut flat, or given the irregular outline resulting from usage. The anatomical lines of the natural teeth should be accurately copied. The labial surfaces of the natural teeth often indicate that diseases or severe fevers have been guests, and when we substitute a Logan in these cases it must bear these same symbols, while the mesial and distal surfaces must be trimmed and shaped to harmonize with the general statue of the patient.

"The recent published proceedings of the Illinois State Dental Society reports as follows regarding my clinic: "Clinic No. 35, patient, Mr. J. Hynes, presenting a broken superior central, the other natural teeth being a case of arrested or interrupted development. Dr. Cigrand set a Logan crown on the prepared root, and so ground down the surfaces of the Logan as to perfectly match the natural denture. The peculiar notched surfaces with sunken lines and irregular depressions were produced into the Logan crown by grinding down the artificial crown at points corresponding with the natural."

"The Logan can be employed in all cases of a similar character. Illy developed teeth, as the Hutchinson, can be imitated in like manner. In the clinic just referred to, I completed ground off the glistening labial surface with corundum wheels, and after subjected the tooth to hydrofluoric acid, and this gave the Logan crown a lifelike appearance. All artificial teeth, the Logan included, have too marked a gloss to appear natural; a diminution in this brilliancy will

add a considerable to their natural appearance.

"Those dentists who have a dental furnace can stain the Logan so as to perfectly reproduce the lost natural crown. How unbecoming and painful it appears, when the partial natural teeth whose several cavities have been filled with various filling materials, the adjoining porcelain crowns off shade and so illy positioned as to present a hideous contrast."

This was written before the Davis or the Justi were supplied and these latter's crowns can be employed to better advantage in the case here suggested. Hence in the one case to insert a smooth well shaped crown, while in the later you adjust a crown carved to correspond with the neighboring rough-faced natural teeth.

### GOLD INLAYS 500 YEARS AGO

Prof. Marshall H. Saville

A custom which we have found in Esmeraldas, and which, so far as we are aware, is not present in any other part of South America, by the insertion of inlays in small perforations cut in the enamel of the upper incisors. In the Mayan area, as far south as Salvador, the object most often used for the inlay was jadeite. In Mexico, for example in Oaxaca, I have found hematite used; in Vera Cruz turquoise has been found, and in other parts teeth with settings of rock crystal, obsidian, and a red cement have been found. We have never heard of this custom in Colombia or Peru, but in Esmeraldas, in Atacames, skulls have been found with tiny disks of gold set into the teeth in the same manner as in Mexico and Central America, with the exception of the material.

In the Province of Esmeraldas, about 18 miles southwest of the city of Esmeraldas, I found a skeleton in a burial tube in the right bank of the Rio Atacames, just above the town. The skull was found with the teeth inlaid with gold, but the finder contented himself by breaking off the superior maxillary, throwing the rest of the skull away. The two upper middle teeth are decorated by the insertion of thin gold disks in cavities drilled or bored in the enamel of the face of the teeth as shown in illustration. An unusual dental feat, in addition to the decoration, is found in the right middle tooth. This is not a right middle incisor, but a right lateral incisor which does not belong to the jaw but was implanted to replace the middle incisor. This is a remarkable feature. Had the gold overlay not been tightly fitted over the exposed dentine, decay likewise would have been rapid, but there is not

a trac of decay on the surfaces of the dentine where the overlays have been lost, nor is there any indication that the decoration was not worn for a considerable time during life. Some of the inlays were covered with tartar, showing the work done during life and not post mortem.

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### DIFFERENT THAN YOU DO IT?

If, in filling approximal cavities with silicate cement, no tantalum spatula is at hand, and bone or agate spatulas prove too thick to obtain good condensation and contour, a stick of hickory wood is whittled into the shape of a spatula of the desired thickness. This wood is dense and supple enough to afford entire satisfaction.—C. Mussat.

---

In case of a necessary rapid repair of a plate or a bridge with non-interchangeable teeth, where appearance is more important than durability, retentions are cut in the plate or the body of the bridge with a fine bur, leaving the pins undisturbed. In place of the broken tooth, a temporary substitute is built up and modeled in synthetic cement.—Journal Odontologique.

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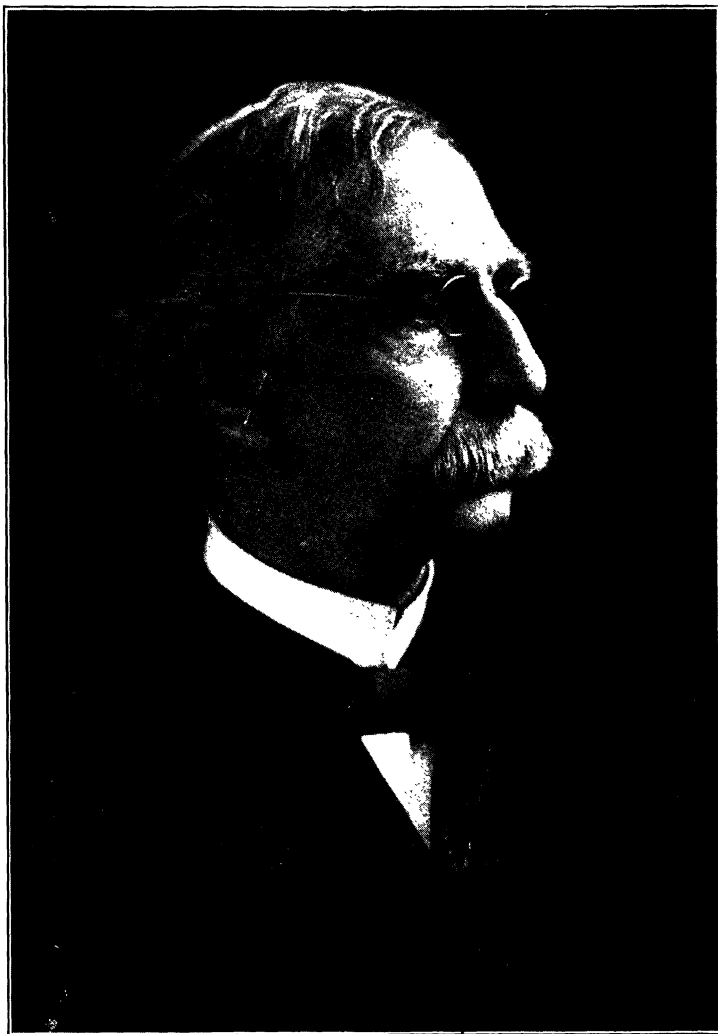
Patients very often complain of toothache upon the eating of hot food. The sensitive tooth, however, cannot always be found by applying hot water from the syringe, since the water invariably comes in contact with several teeth. The offending tooth can be readily be determined by grasping a piece of impression compound of the size of a marble with pinchers, heating it over an alcohol lamp, and touching with it the teeth suspected.—oVn Beust, Archiv fuer Zahnheilkunde.

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TO MAKE OVER AN OLD BUR.—When a bur becomes dull and of no further use, it may be made useful again by grinding half away on an emery wheel, thereby making an inverted cone out of it.—T. J. Ford, D. D. S., Searcy, Ark.

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The war has disturbed many things and The Forest Press, which for thirty years was a flourishing printing plant, was compelled to go into receivership; this tied up the issues of the American Dental Journal for three months, hence this delay. The Bergeson Print Shop issued this number and will give us artistic and creditable workmanship.



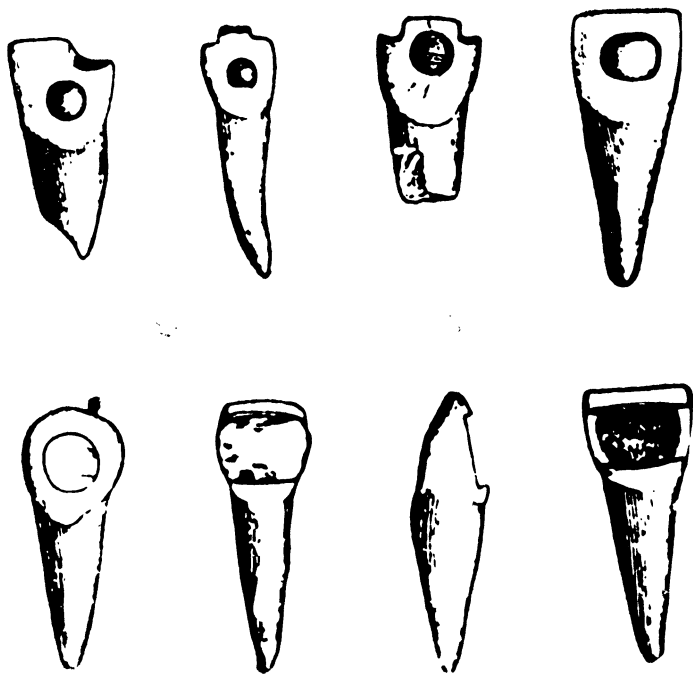
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Late venerable friend





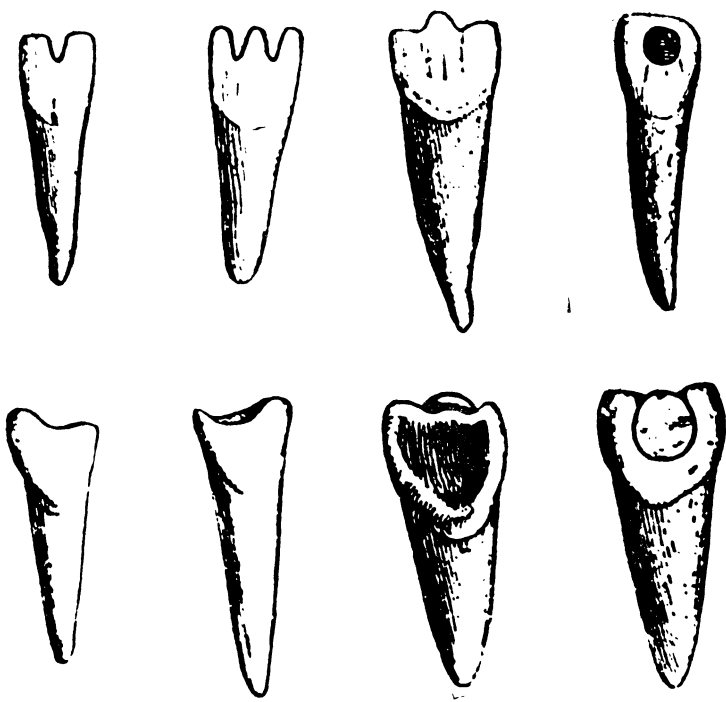
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Ancient American Inlays





Ancient American Inlays



# The Army and Clean Living

BY HENRY F. LEWIS, M. D.

First Lieut. Medical Reserve Corps, U. S. Army.

THE army which was mobilized last summer from the National Guard has rendered the country a signal service, worth every cent that the mobilization cost. This service was not alone protection of the border, nor yet the training of the troops, not even the stimulus to the idea of national preparedness. Its sanitary lessons are invaluable. The benefit is incalculable; the cost is measured only in dollars.

That the cost was not reckoned in blood and anguish is because of the wise management of the authorities at Washington, and of the military commanders in the field. That the cost was not reckoned in sickness and suffering is because of the preparedness of the medical department of the United States army.

The troops were selected after thorough physical examinations so that few weaklings slipped into the army. The soldiers were protected from typhoid, the chief enemy in the Spanish War, by protective vaccinations and by carefully worked-out sanitary measures. These sanitary measures were embraced in the term "clean living" and consisted of burning all garbage, refuse and stable manure; proper location and handling of latrines; selection of good water; supervision of food and of its treatment in the kitchens; successful attacks on the fly and the mosquito.

Multiplication of flies was prevented by destroying the refuse and manure where the insects might breed or destroying the eggs before they could develop into more flies. Thus typhoid, dysentery and other intestinal disorders were reduced to a minimum. Feeding of flies was prevented by screening kitchens and all food. Such flies as survived were trapped and burned.

The mosquito plague was controlled by draining camp sites, by allowing no stagnant water to remain anywhere near, even in old tin cans or hoof prints. Whenever possible the soldiers were furnished mosquito netting and required to use it. Thus malaria and yellow fever, besides other less common diseases, were largely prevented.

All these things required inspection of the most rigid sort, because rules and regulations will not enforce themselves. The army got rigid inspection from the medical officers. These pestiferous men nosed around everywhere. They kept close watch of the deposit of personal excretions, and woe betide the slovenly soldier, officer or man, who was caught offending. Every sentinel, day and night, was ordered to keep his eyes open for such infractions of discipline and had authority to arrest any offender. The latrines and urinals were kept scrupulously clean and were almost without odor. Medical officers of high rank did not consider it beneath their dignity to peer and sniff anywhere in order to detect a nuisance. If a few flies were found about a damp spot on the ground near a kitchen the cook was liable to discipline for pouring dish-water there.

An efficient method of reporting and timely preventive treatment minimized venereal diseases. Alcohol was not allowed in the camps. Undue indulgence in liquor outside of the lines was punished by guard-house imprisonment and assignment to disagreeable menial tasks.

The food supplied was simple, but ample and good. No "embalmed beef" was foisted upon this army.

With an army engaged all the time in strenuous military training, in marches, "hikes," maneuvers—all the activities of real war except the carnage—of course all of these sanitary measures could not always be perfected. On the other hand, the slips from sanitary perfection were so few that they served only as exceptions which prove the rule.

Let us consider the results of rigid application of modern sanitary regulations to an army composed for the most part of ordinary young fellows such as we see daily in the store, the shop, the office, or on the farm. I was personally concerned in the muster-in examination of over five thousand men of the Illinois National Guard who went to the border. I also took part in the muster-out examination of two regiments of infantry and a battery of field artillery. Thus I had some opportunity of judging of the physical condition of a large number of men "before taking" and "after taking" a severe summer of military training for three months under conditions of actual service.

The spirit of the troops as they set out for the border was excellent; they were eager for adventure, glad at the prospect of new experiences and "spoiling for a fight." Physically they were fair specimens. They had undergone preliminary examinations by the medical officers of their organizations before presenting themselves before the U. S. medical officers and were mostly in good health and fairly well developed. But, they were flabby, pale, stooped, lazy in movement and in response to commands. Some were over weight but most were several pounds under weight because of recent hard work at their drills and other soldierly work in the heat of Springfield. In other words the men were "soft."

During their service in the United States army they did not live the lives of pampered pets. They had hard work in the summer heat of southern Texas and New Mexico; they fought the alkali dust and the "chigger" flea; they slept outdoors during the cool nights; they often got drenched to the skin; they sometimes could not get baths for indefinite periods. On the other hand, they had good plain food, regular hours, disciplined exercise and all out-doors in which to breathe. They were protected from infectious diseases.

On their return to Springfield for muster-out I saw the same young men much changed in appearance. They had hard and easy-working muscles, bright eyes, tanned skin and a wholesome vigor. They had little superfluous fat. Those who were under weight had gained and those who were too fat had lost; all were nearer the healthy normal. Even majors, "fat, fair and forty," had lost their aldermanic proportions, had only a graceful curve where the bay-window had been, had firm-set jaws instead of double chins and had lost five or ten years in apparent age. The enlisted men and younger subaltern officers stood erect, were quick in perception, snappy in their movements, precise and obedient in action.

To sum up the changes wrought by three months of soldiering under practical war conditions upon the men and officers of the National Guard who came under my observation, I say that they went to the border militia-men and they came back soldiers.

# Dressing for Health

## Some Hints as to Correct Clothing for the Winter Months

BY EFFIE L. LOBDELL, M. D.

**T**HE proper distribution of clothing has much to do with the good health of all ages in this climate, especially at this season which has several varieties of temperature, moisture, wind and calm, any or all occurring within twenty-four hours. We know that the mouth and deeper breathing passages contain germs at all times, the same germs, in fact, that may at any time become our fatal enemy, but are quite harmless as long as the body is kept in a good state of resistance to their presence. We also know that many of our internal organs, such as kidneys, liver, spleen and joints are the resting places of germs for months, years or a lifetime, after once we have had the body overwhelmed by any special germ in sufficient number and strength to constitute a disease, such as scarlet fever, diphtheria, pneumonia, malaria and typhoid.

We know that the body loses its resistance to these disease germs more rapidly than it reacts, and that the principle causes are the acute ones of fatigue and sudden changes in temperature from exposure to extreme heat or cold or wet. It may be that the entire body is subjected to the sudden changes or that only small parts of the body are exposed. Because the hands and face are always more or less exposed to the air, it is unusual that through their exposure a depression of the vitality of the person should occur, although there are susceptible persons who will be made ill by having their hands in cold water.

Exposure of the upper part of the body, notably the chest or back, is apt to affect the breathing apparatus, first the bronchial tubes and then the lungs. Exposure of the neck and chest is less dangerous than the exposure of the back because the lungs do not lie so close to the chest wall as at the back and the circulation through large vessels that lie there prevent sudden congestion of lung tissue, just as a radiator in front of a window prevents the frost gathering there as quickly as on one where no radiator stands.

This is why women can wear with impunity such low neck dresses in the coldest of weather although this is partly made possible by the changes that take place in the skin which is exposed continually to the sun, heat, cold, etc. One function of the skin is to prevent the heat leaving the body too rapidly as well as to prevent outside heat or cold changing the internal temperature of the body too rapidly, and it is called a "natural nonconductor of heat or cold."

The child at birth is accustomed to a wet world and so the process of bathing daily, at least once each day, is consistent with its natural texture. The temperature at birth is somewhat higher than a week later and we are careful to conserve that heat during this time, and somewhat inclined to keep it too warm or keep up this process too long, if we do not reason out why we are doing this. The amount of covering to the infant may be gradually lessened daily after birth until a standard amount is arrived at by the end of first month.

The simpler a child is dressed during its first year of life the better, and the less clothes it needs from then on until it is affected by social laws and fashion.

Wool conserves body heat and this can be varied by mixing the texture with cotton or silk to lessen the damage by frequent washing without materially altering its value as a garment. Keeping the child dry is essential because of the chilling of the body from moisture. And keeping the child well fed also keeps up the body temperature and makes it more possible to resist infection.

The school child is apt to be overdressed. If it were to be out of doors from the time it left home until it returned, the usual smothering with clothes would not be so bad. But it gets to school, plays violently until the last moment, rushes in too late to properly take off its garments and perhaps wears rubbers and leggins, etc., until recess and so it soon shows the effects of uncontrolled body changes by sweating feet, oozing nose and other hothouse symptoms. Then too, insufficient food of the kind to produce heat plays an important role with the class of children who are always ailing.

If they survive this troublesome age, as do the most, they emerge to the point where "their appearance" is more important than what they are to learn or their health. Some one has "noticed them" and so they begin to notice themselves and the mirror plays a more important role than anything in the way of clothing or food that they have been accustomed to up to this time and the saving feature of it all is that they no longer will consent to tolerate the home remedies for leaking noses, snuffles, bad breath or pimples.

Clothes are no longer chosen for their warmth or coolness, but appearance first. Durability, is no longer a virtue. Style is the necessity, so that it becomes a matter for the manufacturer to devise acceptable garments for all classes of boys or girls whose greatest variation shall be in prices. For the girl in moderate circumstances must have the same cut, color and appearance as does the boarding school girl or she will fall down in her studies. I shall not at this time talk of the influence of dress on the individual. Everyone has felt it and knows the necessity in maintaining self respect.

Less clothing is worn nowadays by girls or boys than formerly and it is wisely so, providing the distribution is properly arranged. For this season, the body should be covered from neck to ankle with one layer of the same material. The union suit accomplishes this the best. This is the fundamental protection of the internal vital organs against sudden chilling and is like putting on an extra skin as do the fur animals whose coat thickens and lengthens for the winter. Stockings of similar texture should be worn and shoes with a thicker sole. One of the most delicate parts of the body is the sole of the foot, which you can readily prove by examining the foot and seeing the finest, softest skin of the body there, not excepting the palm of the hands.

The greatest variation in dress, according to the kind of atmosphere in which one works or lives, is possible in the conventional dress and is offset for outdoor conditions by the kind of coat or cloak one wears. So that the dress next the skin and the outdoor garment are after all the most important for this season in this climate.

The skin readily accustoms itself to exposure or smothering. In Germany there is a fad for the "Luftbad" and most of the health institutions have a sort of Garden of Eden in connection with the grounds where they indulge in ancestral worship by imitation. One orphan asylum I visited in Berlin, under the patronage of the Kaiserin, had a small park on the banks of the river. Each morning there would flock there

with the attendants a host of nude girls from infancy to puberty. This day was cold and cloudy, yet there was no change in the program. Those who could walk chased each other around the grounds to keep up body heat and some turned blue and some remained rosy and apparently unaffected. The attendants with clothes on seemed to feel it most of all. After a few minutes of this they were all treated to a cold spray turned on from a pipe and the little babes-in-arms were held under the pump by the attendants. They kicked, screamed and struggled which was supposed to be their proper reaction, then handed to other attendants, who rubbed them down with bath towels as did the children each other. Then they were raced back to the quarters, given milk or light lunch and put to bed for a rest until lunch time. Later the boys were taken out and treated likewise. The doctors said they rarely were afflicted with "colds."

Although practically the same thing goes on during the summer at our bathing beaches, it is only popular with a small class, and unless made less conspicuous and public, is not likely to be generally followed, and I am not sure that it is not more creditable to maintain health in spite of clothes rather than acknowledge clothes a modern disadvantage.

---

## Living Longer

### Some Timely Suggestions on a subject of Interest to All

BY JOHN DILL ROBERTSON, M. D., Commissioner of Health.

**I**F at the age of forty or forty-five you are beginning to think or "feel" as it is usually expressed, that you are growing old, forget your birthdays. Cease to have birthdays if you are letting the old age idea possess you, causing you to feel that only the years which have gone by are the valuable ones of life. The "speeding-up" mania of American commercial enterprises, causing them to fill their ranks with youthful blood has no doubt helped in the prevalence of the idea that a man is old at forty, his best work done and there is little hope for new achievement or success after this mark has been passed.

The European war has brought out this great truth, that the mature, level-headed judgment of the man with years behind him is worth more than the fire and enthusiasm of youth. The man of forty who has lived moderately in all things, who has not been overfed and under exercised has only reached the threshold for life's biggest accomplishments. At this age it should become the practice of human beings to submit to a periodic health survey. If men and women would follow the advice of modern medical science in submitting to careful examinations for the purpose of keeping well, rather than curing sickness, it is safe to say that fifteen or twenty years could be added to the average life. Each life would also be made more happy and in every way, more worth while. An American scientist who has been making studies of the influences favoring longevity concludes that work is one of the most powerful of all. If people could be constantly using the great powers of the will and imagination in some form of loving and constructive work years would be added to the average span.

"Withdraw from life, and life in turn withdraws from you," is a truth expressed by one writer. When men and women accept the idea.

that their life for activity has been lived, that their day for retirement has come, when they give up their work, exercise and pleasures, and resign themselves to the business of growing old, they have invited the rapid degenerative changes which come with inactivity of body and unhappiness of mind.

Why give up our life-giving occupations at forty or fifty, or sixty, or any other age? The rapid changing and disturbing influences of the world today need more than ever before the mature judgments of men past fifty.

Harriman was unheard of before the age of forty. Gladstone was doing his epoch-making work at seventy-seven. Grant was clerking in a store at forty, while Sir William Osler himself would have died unknown had his life been terminated at the end of two score years.

---

## Save the Sand Dunes

Will be of Immense Value from the Standpoint of Public Health

BY CLIFFORD MITCHELL, M. D.

**N**EAR every large inland city there should be a National Park of large size reserved forever for the use of the people, and containing attractions sufficient to draw the crowds away from the cities on Sundays and holidays. Chicago could find, for example, such a tract within an hour's trolley ride from the city, namely, in the wilderness of northern Indiana along the south shore of Lake Michigan, a region extending from Whiting to Michigan City or farther, about fifty miles in length and perhaps twenty in width, large enough to accommodate thousands of pleasure seekers. If this region were made by Congress into a National Park, drained and cultivated, and if the boulevard system and trolley lines of Chicago (in addition to the numerous railroads) were extended to it and through it, the benefit to the city's population in future times would be incalculable.

The strip of land above referred to includes the Sand Dunes, now so well known to the people of Chicago.

The question of redeeming it from commercial uses to a greater service for the public is now before Congress and it is urged that all readers of "Clean Living" use what influence they can exert in favor of saving the dunes.

Great as are the needs of the various commercial enterprises in and about Chicago, that which contributes health to the thousands who, by their labor, create the products of these enterprises is still greater.

For clean living we require clean breathing, and for clean breathing, we need ready access to a large region, the air of which is free from fumes, smoke, and animal exhalations. Such a region Chicago now has at its very gates in northern Indiana.

Shall the many enjoy it, or the few exploit it for commercial purposes? That is the question.

---

The tooth brush is a policeman whose duty it is to arrest and banish the enemies of physical peace and comfort before they enter the halls of health. See that this guardian is on the job.

# Laundry Workers

## Conditions That Undermine Their Health and Shorten Their Days of Usefulness — Importance of Industrial Hygiene

By E. R. PRITCHARD, Secretary, Department of Health.

**T**HOUSANDS of men, women and girls, are employed in the laundries of Chicago in the necessary and useful occupation of cleansing and making fresh and sweet the garments that are soiled and stained by wear and occupational use. There is, as I understand it, a wide range of methods used, that is, taking laundries as a class. I include in this term, all kinds of places from the home of the widow who takes in washing, to the largest laundry plant, with its scores of employes and equipment of the latest and best machinery for turning out each day the wash of a whole community.

With the growth of the laundry business and the advances made in improved machinery of all kinds, the old fashioned hand methods have been abandoned and the old fashioned "wash woman" is fast disappearing.

We are living in a time when it is beginning to be understood that the health of its people is a nation's most precious asset. This is wholly aside from the admitted right of every human being to live and to work under the best possible conditions affecting his comfort, safety and health. It is because of the growing recognition of these rights that industrial hygiene has taken its place among the important sciences of today; and concerted and organized efforts are now being made all over the civilized world in applying it for the direct benefit of those who toil in what are known as the dangerous trades.

The beginnings of this great work are to be found mainly in the first laws that were enacted, providing for and requiring the adoption of devices for protecting workers from mutilation and death by dangerous machinery. Then came the next step in enforcing the use of protecting devices from noxious fumes and vapors, dust and other agencies known to be dangerous to those who are exposed to them. Next came laws providing light and adequate air space, and so there has been a slow but steady advance in the efforts that have been made to lessen the dangers of those who toil in mine or mill, factory or workshop, from the days of Ramazzina, the humane and learned Italian physician of the 17th century, who wrote the first book on "Diseases of Tradesmen," down to the present time.

Because of this advance, some of the diseases peculiar to certain trades have been almost wholly eradicated and are only heard of or encountered in instances where all well known rules of industrial sanitation have been wholly disregarded. An example of this may be found in the almost complete disappearance of what is known as "Phossy Jaw," or necrosis of the jaw bone in match makers, or those who work in match factories, who are constantly exposed to the fumes of phosphorus.

Dust of all kinds is dangerous, that from stone or metal being particularly so. It is among those engaged in these occupations that the highest death rates from consumption are to be found. For example, among bankers, brokers and officials of companies about 100 out of 100,000 die each year from consumption, while among stone cutters and marble workers about 550 deaths are annually attributed to the sam-

cause. And so about the same proportion seems to hold all through the entire list of the dangerous trades.

The laundry trade has only developed into a great industry within the past two decades. The hand laundry, either large or small, is becoming more and more rare. Power plants, either steam or electricity, are rapidly superseding all other kinds of laundries. So far the studies of those engaged in industrial hygiene have not reached any very definite conclusions, for the reason that most of the diseases to which those who work in laundries are found to be subject are those which might be induced by many other causes.

It is a fact, however, that the heat and steam, the exhausting manual labor, most of which is done standing, and finally the long hours, which, I am told, prevail in this industry, cannot fail to have a marked influence on the health of the workers as a class. Statistics made among laundry employes in England and noted in Dr. Oliver's work on the "Dangerous Trades," show that the most noticeable effects upon laundry workers were manifest in the prevalence of ulcers on the legs and varicose veins. In one laundry of 247 employes, 36 were found with ulcers, or one in six; 21, or one in eleven, had pulmonary consumption.

It is perhaps hard to estimate the discomfort and suffering among women who work in these places, mainly because of the long hours, and for the reason that most, if not all, of their work has to be done standing. It is definitely known, however, that among the women workers the peculiar and painful ailment known as leg ulcers is prevalent to a degree that warrants us in classifying it as a disease peculiar to those who work in laundries.

It is also known that ironers suffer from headaches and sore eyes as a result of constantly bending over the gas-heated irons or mangle rolls and from the fumes of the gas. My own notion about it is, that the gas of today being oil and water gas and rich in the deadly monoxide as well as the usual carbon dioxide, is mainly the cause of the headaches. The sore eyes I would attribute more to the imperfect or artificial light and to the constant presence of an abnormally high degree of heat. Another feature of the average laundry is the "close, stuffy" smell, noticeable to an outsider upon entering even one of the best of these places. This is due to imperfect ventilation. This can mean but one thing, and that is, in such a place the air is bad and, of course, needs remedying.

In my own judgment, next to the odors from "Bubbly Creek" or the average rendering plant or glue factory, I know of none other that quite equals in offensiveness that coming from a dirty, poorly ventilated laundry. As a matter of fact, you cannot only smell it, but you can taste it. Oliver asserts in his admirable work, that in England the workers in the sorting rooms are peculiarly exposed to this discomfort of the offensive laundry odors. Whether this be true as to the laundries of Chicago, I do not know; but taken as a whole and including every branch of its service, the laundry demands of its employes long hours of hard and exhausting labor. Because this is true, it would seem that the humane employer would see to it that every possible means are used to safe-guard the health of his employes. He should do this too, not alone from the humanity standpoint, but also from that of a sound business policy.

# The Clean-Life Campaign

By LUCY PAGE GASTON, Director and Founder of the Anti-Cigarette League of America.

**I**T seems eminently fitting that the Clean Life campaign now being pushed in the public schools of Chicago, should have mention in the "Clean Living" magazine.

This campaign under the auspices of the Anti-Cigarette League is being conducted, by invitation of the Board of Education, as a means of helping to improve moral conditions, not only in the schools, but in the communities. Schools, churches, and other agencies, with their present methods, fail to accomplish all that is needed and should be supplemented by a definite moral reform work in which the boys and girls take a leading part. The Anti-Cigarette League seems to be the organization best suited to this difficult undertaking. The question of morals, in this and every other city, seems to be the unsolved problem.

Many other cities are looking to the Anti-Cigarette League for help and while the work in different sections of Chicago is under way, a little time is being given while the services of Dr. Kress are available, during the month of November, to outside activity. Valparaiso, Indiana, with its great University felt the need of help and the "Chicago Plan" is proving a great success in this interesting little city. Battle Creek, Michigan, is arranging for a two-days campaign in which the sanitarium forces and the city unite.

Dr. D. H. Kress of Washington, D. C., has given much attention to the tobacco question and especially to cigarettes. He is able to speak from the scientific and medical standpoint, and in connection with his community stereoptican lectures he is meeting with great success in reaching smokers in all parts of the country.

While addresses on the cigarette question have been authorized for years by the Chicago Board of Education, only recently has formal authority been given for the organization of Anti-Cigarette Clean Life Clubs in the schools, with a designated time for meeting. Principals, who are opening the way for this innovation are much gratified with the grip which the club gets upon the entire body of pupils including many boys who are the worst offenders. The appeal made is heroic enough to stir the blood of young Americans and when a school really gets into action, choosing its Clean Life Team and electing a captain, enthusiasm runs high. The strong are lined up to help the weaker and unless all signs fail this unique way of fighting evil will do much to regenerate the youthful element of society and check the growth of juvenile and youthful delinquency.

The scientific investigation through the chemical analysis of the products of combustion as found in cigarette smoke made by the London Lancet in 1912 (see issues, April 6th and 13th), has thrown a great flood of light upon the whole cigarette question; but even the medical profession generally, evidently has not given this matter the attention which its importance demands. The disease-producing-vice-and-crime-breeding-boy-destroying-cigarette is an agency such as the world has never before seen as a menace to youth and all interested in the health and morals of the American youth should join in our war of extermina-

tion. We welcome correspondence or personal investigation of the organization that is charged with a heavy responsibility in leading the fight for the very life of our nation which is menaced by the appalling growth of this great evil.

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## “That Spitting Habit”

**S**HALL we say, *sputum*, *expectoration*, or just plain *spit*?

The first two words are from the Latin, the last from the Anglo Saxon, and altogether the English language is well supplied with terms to cover mouth secretions. If we needed another, the Greeks have handed us *saliva*.

So we may take our choice.

Perhaps it would always be better to say with the Romans, *expectoration*, and by the time we have pronounced its many syllables deliberately, maybe we shall have an opportunity to think before we use the floor or sidewalk in offense to cleanliness, self respect, good health and the law.

Yes, the language is rich in terms and the stuff itself is rich in germs, and that is the trouble.

The City Ordinance likes to say *spit*, but not fancying the act, it has provided a fine from one to five dollars for employing a sidewalk as a cuspidor.

*Spit* is a spiteful, snappy, spattering splash which should never be released indoors; or rather it should never be given the floor.

*Spit* is not good to look at on that street car floor coming downtown at ten; early and late in the day, the many feet of standing people hide it from sight, which is the only virtue crowded cars may seem to have.

*Spit* is not improved by being spat upon the car floor and rubbed in with the foot as if to obliterate the spot.

It is not good for sole leather, nor for the carpets and rugs to which it is carried on those masculine shoes.

In short, men, it is high time to cut it out for the sake of the other fellow.

Uncle Sam, every now and then, is reported as about to pay \$25,000,000, or so for an island somewhere.

We are for it—the price is none too big to pay for a place, a far off place, to which all selfish, brutish, pestilential, unfeathered bipeds may be banished who *spit* in the face of decency and good health.

Men, do not *spit*; expectorate, giving yourself time to think before you act, and then do it only in the right place decently and in order, if you must do it at all.

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## Group Safety

**T**HE question of group safety in Chicago is as much larger than the question of individual freedom as the total population of 2,500,000 is greater than one; in other words, individual freedom or liberty does not count where community safety is jeopardized. Society, therefore, has legislated against unmuzzled canines because they menace its health. Society safety is bigger than an individual dog's liberty to the streets.

Society, by law, forbids individuals from spitting in public places. The individual would like freedom to expectorate wherever and whenever he feels like it. But, society's health is bigger than the liberty of any of its Jones' or Smiths' in this regard.

There are a lot of other things which society has put its ban upon; for instance, manure piles, fire traps, badly ventilated and insanitary dwellings, etc. No individual, however, free as he would like to be even in his own house, can have or harbor typhoid fever, tuberculosis, infantile paralysis, diphtheria or other contagious diseases without conforming to certain rules and regulations which society steps into his home to enforce, as society has the right to protect itself against such diseases and conditions, hostile to community health and community comfort, and so she does by ordinances making for clean milk, pure food and uncontaminated water and the like.

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You have a four months' habit of walking in the open. Stop your smoking, if you will, diminish your coffee intemperance, but continue to use your legs. You will eat better, breathe better, eliminate better and sleep better; and the shoe man will make a good living, as he ought to do.

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Employers should appreciate the advantage in dollars, of installing up-to-date systems of ventilation and keeping them active.

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## Having Health Habits

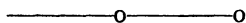
IT is generally conceded that habits are hard to break. This is why stress is laid by teachers of the young on the importance of forming right habits in early life. It is taken for granted that the child trained in the ways it should go will not depart from them in later years.

Among the things that should be impressed early upon young and growing minds is the habit of neatness and orderliness. Slovenly habits mean waste, inefficiency and carelessness. Slovenly habits are expensive in many ways. Especially is this true when applied to conditions affecting community comfort and safety. Here is where carelessness thoughtlessness and slovenliness, taken in their cumulative effects make for ugliness and danger.

One of the most prominent of the weekly publications in the country, discussing community conditions from the standpoints of beauty and safety, says that the litter habit is a national characteristic. People will look carefully after front yards and lawns and throw their litter and waste in the alley or the rear of their premises, and are utterly indifferent as to either appearances or consequences. This is why in every town or city, and in almost every community of the same, we find places that could be called "swell fronts and swill backs."

During the Winter months, too, people are inclined to permit the accumulations of waste and rubbish on their premises that they would not do during the warm weather months. This is why we have our spring clean up campaigns. It means, when you think about it a little, we have been so dirty and slovenly and careless in our habits all Winter long, that when Spring comes, largely as a matter of self-defense against sickness and disease, we proceed to clean up.

The Spring clean up is a fine thing; but let us be clean all Winter and we will not be so dirty next Spring and neither will we have to work so hard to make our city clean and to keep it that way all the time.



## Health First.

**T**HE SAFETY FIRST sign has done us a lot of good. By it many people have been taught a habit of carefulness that has prevented many injuries and deaths by accidents.

People in a great city get so used to noise and rapid movement that they grow careless unless frequently reminded to stop every little while, listen and look before they step.

The innumerable rules and suggestions that have been brought to public attention for preserving life and limb have reformed our statutes and waked up many a corporation to the need of safe-guarding its employes. Public attention breeds public opinion; public opinion breeds progress; and so we are on the move, up and out.

In like manner, *Health First* has entered the consciousness of the people to a considerable extent, and men and women are giving more thought every year to the value of individual health and the need of community measures to conserve community strength and community happiness.

But that we have only half waked up to this need is proved by the increasing number of deaths which Americans suffer in middle life. When we are fully awake, heart disease, hardening of the arteries, kidney disease and other chronic degenerations will not slay us prematurely as they are now doing.

*Health First* means improvement in a lot of our ideals and methods of living.

*Health First* means that the individual shall better know his body structure and functions, of which he is woefully ignorant and thoughtless.

*Health First* means that, knowing himself better, he shall also have a better conception of his value to himself, to his time and to posterity.

*Health First* means that, knowing himself and appreciating his worth, he shall proceed to live as he ought to live, in order that he may round out his own allotment of years, barring accidents.

*Health First* means that he shall proceed to help others live as they ought to live, in order that society may suffer from fewer accidents.

*Health First* means that the perfected individual with perfected knowledge, perfected conscience, perfected ideals and perfected effort shall form a part of a perfected community, fitted to fight community dangers and solve community problems.

*Health First* means, in other words, that each shall keep his own physical runabout or limousine in good repair, well oiled and well powered; that he shall run it properly, so that no machine will damage any other and insurance companies will go out of business.

Who of us is not for *Health First*? Let him stand up and be counted out as a menace to himself and an enemy of society.

Cancer is one of the chief causes of death. The annual mortality in the United States is estimated at 80,000, compared with about 150,000 deaths from pulmonary tuberculosis. While the "great white plague" prevails at all ages, cancer is essentially a disease of adult life. At ages over 40, cancer causes one death out of every eight among women and one out of every fourteen among men. Of the 80,000 estimated deaths from this disease in our country at all ages during the year 1915, approximately 67,600, or 84.5 per cent, occurred at ages of 45 and over.

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This is the season when cold weather will drive us indoors and bring us into close contact with others. To stay well, each of us will have to take a hand in maintaining home comfort. Do not leave it all to father or to mother or to the landlord. It is important to remember that good ventilation means fresh air, clean air, proper heat, proper moisture (or humidity) and air on the move (not stagnant):

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Fresh air will be just as plentiful this winter as it was last summer; but to get it inside our houses, our offices, our shops, our schools and our churches will require special effort. The janitor will try to supply heat and save fuel. He will not be so interested in fresh air as he is in saving coal. Your fresh air supply will be up to you, not him.

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The cough of the consumptive in your face is as bad as if he spat in your face, because it is the same thing.

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Avoid close contact with those having colds; and, if you get one, keep from coughing and sneezing into the faces of others.

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Recent investigations made by the U. S. Public Health Service in connection with studies of rural school children showed that 49.3 per cent had defective teeth, 21.1 per cent had two or more missing teeth, and only 16.9 per cent had had dental attention. Over 14 per cent never used a tooth brush, 58.2 per cent used one occasionally and only 27.4 per cent used one daily. Defective teeth reduce physical efficiency. Dirty, suppurating, snaggle-toothed mouths are responsible for many cases of heart disease, rheumatism, and other chronic affections. Children are not responsible for the neglected state of their teeth. Ignorant and careless parents are to blame for the conditions—which hamper mental and physical growth and put a permanent handicap on our future citizens.

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## Ignorance vs. Indifference

**W**E are a queer lot, we humans. We shudder at the very thought of dangers suspected, but not understood. Having faced them we grow careless and succumb to their attacks.

Who has not a horror of leprosy? And yet it is very feebly communicable. It is little understood by the public. The horrors of the leper colony are in mind: The cry "Unclean," "Unclean" of the people of ancient days rings in our ears and we are filled with nameless dread at the very thought of leprosy. And yet, tuberculosis, which is always with us, is many times more communicable.

We see consumptives daily on our streets. Their cough we do not like, and yet it sounds from the seat behind us in the car and the spray of it is upon the back of our necks.

We write and preach about the promiscuous expectorations, and yet we see it done on every hand against the law without a protest. What, if we knew the fellow was a leper? How quick would we seek transfer to another car and gladly pay another nickel? And yet that consumptive spitter and cougher is a hundredfold more hostile to our health than a victim of leprosy would be.

That 4,204 people died in Chicago during 1915 of tuberculosis does not seem to trouble us much. But let a single case of leprosy appear, and what hysteria has the public press! How nervous the people!

We are indeed a queer lot. We should continue to dread the rare plague, but wake up to such a pitch of fear of tuberculosis, the common danger, that we shall make it as infrequent as we have smallpox.

We lose our fear of measles, though it killed 240 in Chicago last year. In similar fashion we read that typhoid killed only 132 Chicagoans last year and make it a matter to paragraph in passing. But let an Eastland take 812 lives at once and the whole country is aroused. We really ought to think not less of the people of the Eastland calamity, but wake up to the greater disaster of 679 deaths from diphtheria in Chicago during 1915, and take steps to prevent its repetition.

You have the means at hand of absolutely preventing every death from diphtheria—"antitoxin" used in large doses promptly.

When that sore throat and beginning sickness of the child shall come to be recognized at once and a physician put in command immediately, diphtheria will become a curiosity and a death from it almost unknown.

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Sow good habits and reap sound health and physical vigor.

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We can't all be learned and great; but all of us should be wise enough to keep clean.

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It is said that typhoid fever, a filth disease, costs the people of the Western world more than \$270,000,000 a year. This is a tremendous amount of money to pay on account of a disease that is preventable.

Defective drainage and ventilation of the nose and throat, by reason of adenoids, tonsils, bone and cartilaginous deformities and other causes of obstruction, are responsible for frequent colds in the head. When these are corrected by discreet surgery, the benefit is remarkable.

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## Alcohol and Athletics

**A**-GREAT newspaper editor once said that Connie Mack had more influence with the health of young men of America than any other man. Mothers are teaching their boys that if they wish to stand high in athletics they must not drink, they must lead clean lives. A victory in the field of athletics is always a victory for clean living. When Mack was asked to what he attributed the success of a great team he said, "To clean living and quick thinking, and without the one you can't have the other—the quick thinking."

In athletic circles temperance has a broad meaning and applies just as much to eating as to drinking. It is easy for an athlete to "dig his grave with his teeth" or "to eat himself out of the league." We are told that Old Man Booze has put more men out of the league than all the umpires put together.

Twenty years ago drinking was common among athletes, but today it is rare.

Alcohol inevitably slows a man down. Moderate drinking will cut off at least one third of a ball player's life on the diamond. Five or six years ago a man who drank might be given a trial in athletic work provided he gave hopes of reform. Today managers do not bother with young men who drink. It is their fixed policy. Wisdom? Yes, for they have proven to their complete satisfaction that champions depend upon the business of clean living and quick thinking. There's no denying their proven facts that alcohol taken in smallest quantities rapidly "unfits" the athlete and renders him non-dependable both mentally and physically.

J. D. R.

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## Curable Deafness

Is your child hard of hearing?

Is it apparently slow to respond when spoken to?

Does it turn one or the other ear toward you when called?

Does it show lack of interest in what is going on?

Does it seem dull?

Does it frequently put its hand to its ear or the side of its head, as if uncomfortable?

Does it cry with earache?

Consult a physician if you suspect something is wrong with the child's hearing, as it will often save nine times the trouble and expense; neglect of a curable disorder of the ear is apt to mean incurable deafness later.

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## Don't Discard the Dentist

His Services Are Important from Youth to Old Age in the Care  
of the Teeth

Some people seem to think that dentists are only of use in lancing gum abscesses, pulling aching teeth, filling cavities, bridging deficiencies, making plates and crowning stumps, with gold.

These things are all necessary when those same people ignore the dentist until they have trouble and meanwhile seldom use a tooth brush and never use it right.

As the modern physician must be prepared to relieve suffering and cure diseases, so the modern dentist must know how to correct faults, relieve pains and stop decay. But both of these public servants must consider the preservation of health through disease prevention—their chief function. The doctor and the dentist are preaching and practicing preventive measures. But the people must learn to consult them for advice in how to avoid trouble.

From babyhood to old age the teeth are priceless possession.

Their place at the very gateway of nutrition and strength proclaims their importance.

As cutters and pulverizers they are to prepare solid food for digestion and absorption by the hungry tissues. If they are ignored, the stomach is overtaxed, the intestines overcharged with undissolved, decomposed food masses and much food is wasted because it is unprepared for use. This waste makes not only for extravagance, but for danger through disease.

Teeth are not equally strong, sound and firm in all people. Some are born with soft, malformed and misplaced teeth, which need tending from early infancy. But even the strongest and finest will become discolored, decayed and loosened in their sockets if neglected.

To live long, healthily, happily and usefully, we must begin life by proper habits in tooth culture and keep it up every day.

The baby teeth must be cared for by the mother under the direction of the family dentist.

When the permanent teeth come in straight, under the further guidance of the dentist, the growing child must be schooled in the use of a good brush, aided by a suitable powder or paste, and a cleansing mouth wash, morning and night, and after each meal.

This means a lot of effort but it will prevent a lot of suffering and save life.

Which is best, to invest a little time and intelligence each day and a little money occasionally, during a long, comfortable life getting expert advice, or to harbor a dirty mouth and bad breath in youth, suffer torture at 30 or 40, absorb disease and die at 50, while spending a small fortune for dental work, seeking too late to stop the ravages of decay?

Business efficiency, for the good of all departments, see to it that the receiving room, the mouth, handles its materials in systematic, orderly, scientific fashion with an expert on the job.

*Consult your dentist often and teach your child dental hygiene for everyday use.*

A. M. C.

## Brace Up!

**A**RE you banking on good health and a steady job?

Then don't slouch as you walk. With shoulders squared and back erect, you not only look better but are better. BRACE UP.

Don't bow your back and round your shoulders as if the burdens of life were too heavy. All loads will be lighter if you BRACE UP.

If you are a desk man, you should take special precautions against stooping. Night and morning swing a couple of dumb-bells or even your empty hands. It will help you to BRACE UP.

As the muscles of your shoulders and arms and back develop, you will tend to use them in holding yourself erect. These muscles will demand attention and remind you to BRACE UP.

You who sit all day in one position, square your shoulders and BRACE UP.

The "consumptive stoop" does not make for health. BRACE UP.

To walk with shoulders sagging, abdomen prominent and head forward suggests flabby muscles, weak nerves and poor digestion. BRACE UP.

The slouch, the sag, the droop, the slump are poor guarantees of fitness. They endanger your health and your job. BRACE UP.

# The Fate of the Child Brigade



BY ARTHUR M. CORWIN, A. M., M. D.



Twenty years, Twenty years,  
Twenty years onward,  
Into the clutches of death  
Grew the six hundred;  
Forward the *Child Brigade*,  
Innocent born and bred,  
Into the dangers of death,  
Crept the six hundred.

Forward the *Child Brigade*;  
Was one of them dismayed?  
None of those infants knew  
People had blundered;  
Though all of them awoke,  
Few of those babies spoke,  
They were such little folk;  
Into the dangers of death  
Toddled six hundred.

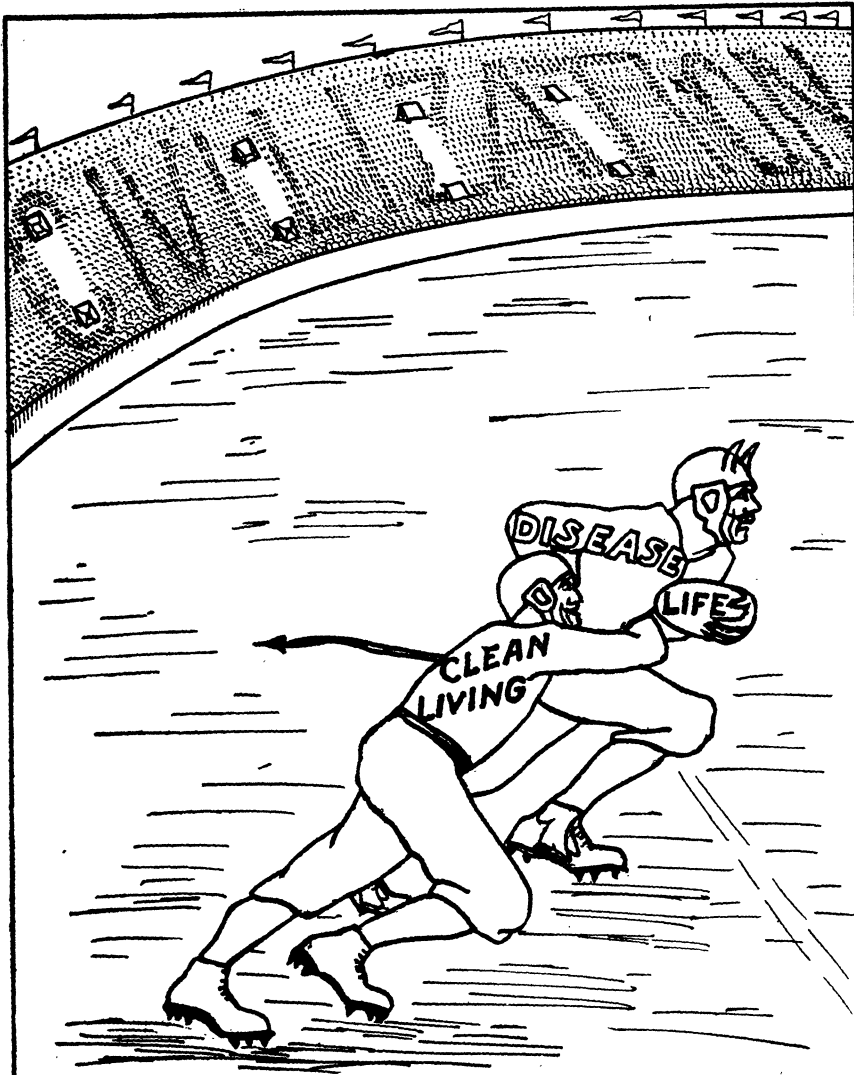
Microbes to right of them,  
Microbes to left of them,  
Microbes in front of them,  
Could it be wondered  
Sickness was multiplied?  
While their poor mothers cried,  
Scores of those babies died,  
Community's victims;  
Worthy six hundred.

Whooping cough took its share,  
Spread through infected air,  
For no one had a care  
Whose baby caught it, while  
All the world blundered;  
Measles and scarlet too,  
Their many victims drew;  
Throats diphtheric, slew  
Part of a hundred  
Who lacked antitoxin;  
Hapless six hundred.

Microbes to right of them,  
Microbes to left of them,  
Microbes in front of them,  
Lawlessly plundered;  
Coughed at from every side,  
Sneezed at both far and wide,  
Infected milk beside,  
One fifth of those children died,  
E'er they reached twenty, fell  
Those that were born so well,  
Fated six hundred.  
What shall the answer be?  
Can not we parents see  
How we have blundered?  
Now let this vow be made,  
Guard we this *Child Brigade*,  
Darling six hundred.

Note: During 1913, 1914 and 1915, there were approximately 178, 880 children born in Chicago. During the same period about 35,672 died under 20 years of age, 20 per cent. In other words, at the same rate, of 600 children born today 120 must die before they reach the age of twenty.

These facts are the basis of the following parody of Tennyson's famous lines. This comparison was suggested to the writer by the Commissioner of Health, Dr. John Dill Robertson.



# THE GAME OF LIFE

A CLEAN LIVING TACKLE

Chicago Dept. of Health, Cut K<sup>2</sup>

Designed by A. M. Corwin A.M., M.D.

# The Goldsmith Crown

## Curved Pin

Patent applied for

is made with both detached post and fixed post.

### The Detached Post Crown

is made with a detachable platinoid pin; also a detachable platinum-cased pin.

### The Fixed Pin Crown

is made with platinum-cased pin only. Note: the hole in the crown follows the angle of the tooth, keeping the pin at every point in the crown where the greatest bulk of porcelain is found. Where it is necessary to grind the lingual to any extent on all crowns now being sold, you grind into the hole of the crown.

Dentists who have set a large number of crowns know that there is one way, and **only one way**, to be insured against fracture—place an upper anterior crown so that it will clear the lower anterior teeth in its natural position. In the majority of cases this can only be accomplished by using the **Goldsmith Crown**.

When you once see these crowns and form an adequate idea of their value, you will certainly want to place them permanently in your office.

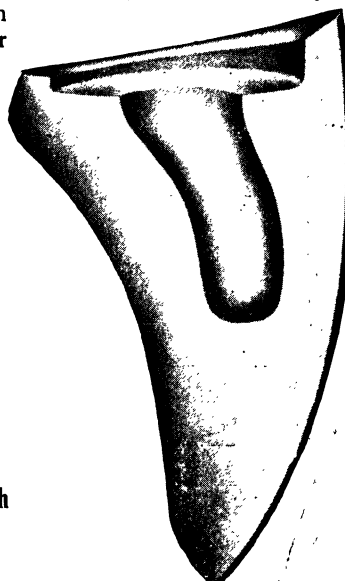
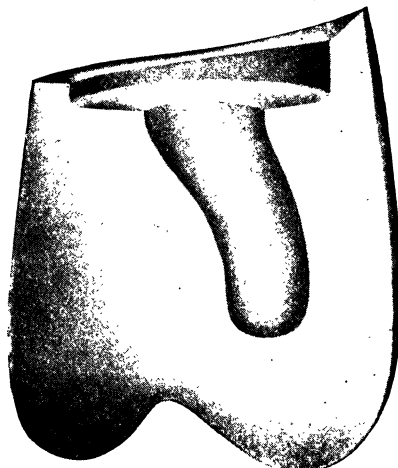
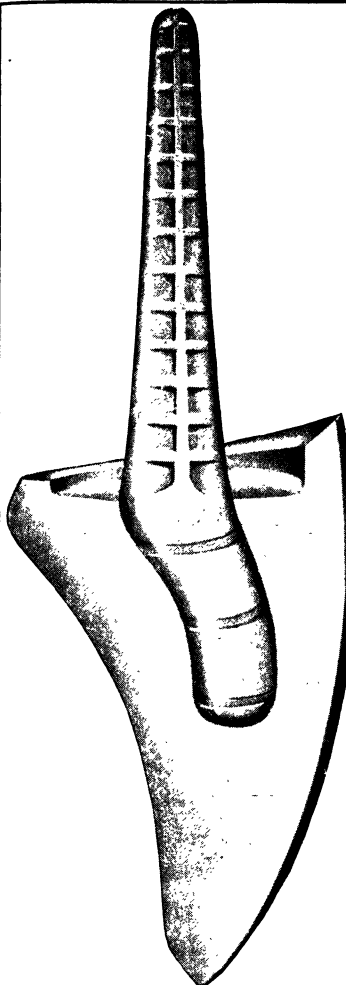
We want you to see these crowns and examine them with your own eyes and hands in your own office.

Price, each  
25c

Lots of 100  
19c

Lots of 200  
18c

Platenoid  
Crown Pins, each  
5c



# **OUR GUARANTY**

**Crowns**

**Bridgework**

**Platework**

Should satisfy you in every respect.

Our mechanics are specialists.

Our material is the best.

We aim to minutely follow your instructions but,

**WE ARE NOT INFALLIBLE.**

If we go wrong now and then it is up to you to ask for a makeover.

Then . . .

**WATCH US MAKE GOOD**

**C. L. Frame Dental Supply  
Company**

**Laboratory Department**

**Mallers Bldg.**

**Chicago**

**Specialists in anatomical occlusion with  
Trubyte Teeth, Steele's Facings and Protesyn.**